REPORT OF COMPLIANCE EVALUATION INSPECTION
(CONSTRUCTION STORM WATER)

AT
Westown Parkway and R22 Intersection Improvements
Waukee, Iowa 50263
City of Waukee
805 University Ave.
Waukee, Iowa 50263

Iowa General NPDES No. 2: IA28471-28214

BY
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION VII
ENVIRONMENTAL SCIENCES AND TECHNOLOGY DIVISION
ENVIRONMENTAL FIELD COMPLIANCE BRANCH (EFCB)

ON
OCTOBER 12 AND 14, 2016

INTRODUCTION

At the request of the Water Enforcement Branch, Water, Wetlands and Pesticides Division, a Compliance Evaluation Inspection (Construction Storm Water) was conducted at the Westown Parkway and R22 intersection improvement construction site in Waukee, Iowa, on October 12, 2016. The inspection was conducted under the authority of Section 308 of the Clean Water Act, as amended. It was conducted in accordance with EPA Region VII Standard Operating Procedures for Compliance Inspections (ENST SOP No. 2332). This narrative report presents the findings of the inspection. All other documentation not included as an attachment to this report has been submitted directly to the EPA files.

PARTICIPANTS

Westown Pkwy & R22 Intersection construction site

- Jenny Corkrean, Stormwater Coordinator, City of Waukee (via telephone)
- Ed Miner, VP of Operations, GreenTech of Iowa
- Kraig Kriegel, Vice President, GreenTech of Iowa

U.S. Environmental Protection Agency (EPA), Region VII- STC

- Naji J. Ahmad, Environmental Engineer, ENST/EFCB

PROCEDURES

I arrived at the SE Westown-R22 intersection construction site at 1:45 p.m. soon after I completed the Glynn Village construction site inspection on October 12, 2016. During my inspection of the Glynn Village site, I met with Mr. Banwart, I informed him that I will be inspecting the Glynn Village site and the SE Westown Parkway road construction site. I concluded my visual inspection of the site on October 12, 2016 at approximately 2:30 p.m.

The following day I called Ms. Corkrean's office. I introduced myself and I explained to her the purpose of my visit, what information I would be gathering during my site inspection, and the procedures of my inspection. These procedures included:

1. Completing the NPDES Construction Storm water Worksheet (Attachment 1);
2. An evaluation of the Storm Water Pollution Prevention Plan (Attachment 2);
3. An evaluation of site inspection and self-monitoring records (Attachment 2);
4. Completing the Stream Characteristics and Water Nexus Sheet (Attachment 4).
5. An evaluation of the site storm water Best Managment Practices (BMPs) and a facility walk-through with photographs (Attachment 6).

After a brief discussion of site activities and the Iowa General National Pollutant Discharge Elimination System (NPDES) Permit No. 2 requirements, Ms. Corkrean informed me that GreenTech is responsible for the stormwater managment at the site. She provided me with GreenTech contact information. Soon after, I called GreenTech and left a voice message.

The next day I received a call from Mr. Miner. I discussed with him my site observations and what information I needed to complete the inspection. I also explained to him the inspection procedures. We agreed to meet on site on October 14, 2016, to conduct a formal exit meeting summarizing my site observations.

On October 14, 2016, I returned to the site. I met with Messrs. Miner and Kriegel and I held a formal exit meeting. I discussed my preliminary site observations and findings. I walked the site with them and I pointed out to them my concerns. I issued a Notice of Potential Violation (NOPV) with one observation (Attachment 4). I informed Messrs. Miner and Kriegel that I would communicate any deficiencies that I may find during further review of the SWPPP and inspection records upon my return to the office.

Mr. Miner was able to provide me with the Stormwater Pollution Prevention Plan (SWPPP). But did not provide me with the site plans. Mr. Miner mentioned that he will contact the City of Waukee, the owner of the project, and ask them to provide me a copy of the plans.

On October 19, 2016, I received an email from Ms. Wendy DeGroot, with Shive-Hattery, that included the site plans (Attachment 3). I also received a phone call from Ms. Corkrean discussing the October 14, 2016, NOPV. On October 22, I received via us mail a response to the October 12, 2016 NOPV (Attachment 8).

FACILITY DESCRIPTION

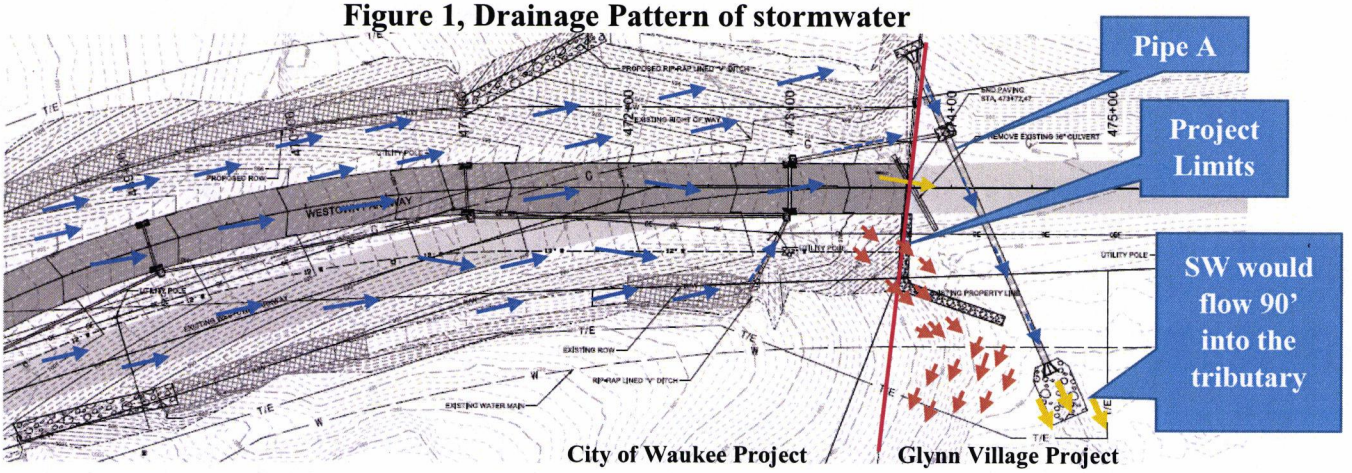
The project consists of road construction starting at the intersection of R22 (Ute Ave) and SE Westown Parkway and extends 900 feet east of the intersection. The project area is five acres all of which had been disturbed. Construction activities on site consisted of clearing/grubbing, utility excavating/installation/backfilling, grading, paving, and seeding. The project is located north of the unnamed tributary of Sugar Creek which is also the receiving stream.

DRAINAGE PATTERN

Based on the site local topography and my observation, stormwater runoff would flow east downhill on the steep sloped north and south ditches into the adjacent property (Glynn Village roadway project under NPDES permit IA-9433-9235).

- Runoff in the north ditch would flow east downhill into a culvert pipe (DSCN1821) that conveys the water south beneath (pipe A) the roadway into an outlet on the Glynn Village property (DSCN1805, 1815, and 1816). Flow from the outlet would flow a few yards (DSCN1806-1807, and 1810-1812) into the unnamed tributary (DSCN1808).
- Runoff in the south ditch would also flow east to the bottom of the hill and enter a culvert pipe (DSCN1801). The pipe conveys the water north beneath the roadway through a series of three stormwater inlets (DSCN1823-1826) until it connects into Pipe A. Figure 1 below shows the flow of storm water.
- Runoff on the unpaved roadway would also flow east downhill into the Glynn Village project.

Figure 1, Drainage Pattern of stormwater



FINDINGS AND OBSERVATIONS

All my site observations noted during my site inspection on October 12, 2016, were communicated with Messrs. Miner and Kriegel during the formal exit meeting on October 14, 2016. All photographs were taken on October 12, 2016.

1. During the inspection weather conditions were rainy and cold, and the ground was wet and muddy.

2. The project is operating under the authority of the Iowa National Pollutant Discharge Elimination System General Permit No. 2 for storm water discharges associated with industrial activities for construction activities. Permit IA-28741-28214 was issued on March 25, 2016, and will expire on March 25, 2017. The notice of intent was submitted on March 23, 2016.

3. Messrs. Miner and Kriegel provided me with a copy of the SWPPP (Attachment 2) during the formal exit meeting. However they did not have the site plans. I received the site plans via email from Shive-Hattery on October 19, 2016.

4. The SWPPP document was signed by the City of Waukee (the owner) on April 5, 2016, and four other contractors (Attachment 2). The earliest signature was on March 23, 2016. The NPDES permit under Part IV. Condition B.1 reads, *"The plan shall be signed in accordance with Part VI.G., and be retained at the construction site from the date construction activities begin to the date of final stabilization*". In addition, Part V.B. of the Iowa NPDES general permit No.2 reads, *"... If there is no construction trailer, shed or other covered structure located on the property, the permittee shall retain a copy of the plan at a readily available alternative site approved by the Department and provide it for inspection upon request. If the plan is maintained at an off-site location such as a corporate office, it shall be provided for inspection no later than three hours after being requested.* The owner did not have a construction trailer, shed, or other covered structure located on the property.

5. Based on my review of the SWPPP (Attachment 2) upon my return to the office, the SWPPP document appeared adequate and comprehensive, and weekly site inspection records appeared to be adequate, but they did not include inspection reports for the weeks of July 12, July 19, July 26, August 2, August 9, and August 16, 2016.

6. At the time of my inspection, there were no activities. The entire south ditch (DSCN1796-1801) and ninety percent of the north ditch (DSCN1822, DSN1827-1830) were recently seeded and covered with green mats as a final stabilization. Messrs. Miner and Kriegel indicated that the stabilization of the site was done three weeks prior to my inspection. The remaining ten percent of the unstabilized area in the north ditch had no erosion or sediment controls.

7. As mentioned above, stormwater runoff is directed to flow into Pipe A which discharges into the unnamed tributary. The outlet of Pipe A had significant sediment accumulation on the ripraps as shown in DSCN1816. The flow to this outlet is a combination of flow from the inlet located in the north ditch at Glynn Village property and the south ditch of the City project.

8. I also observed evidence of sediment from the south ditch into the Glynn Village project site. Sediment passed through at least five stages of silt fence ditch dams into the tributary. Photos DSCN1809, 1813-1814, and 1817-1818 show sediment accumulating in the sloped

wooded area toward the stream. There was about six inch of sediment accumulating in this area (DSCN1817), evidence of sediment passing through the silt fence (DSCN1819), and sediment accumulating against the silt fence dams (DSCN1820) were very visible. I was able to track the sediment (DSCN1805-1808, 1810-812, and 1815-1816) to the tributary as shown in DSCN1808 below.

DSCN1816, Outlet #10, significant sediment traveling downstream to the tributary.

DSCN1808, sediment deposit in the tributary to Sugar Creek from outlet #10.

Based on my observations at this location I issued NOPV#1 because The City of Waukee

failed to prevent sediment from site from entering the Tributary

CONCLUSION

Overall, the site is near completion and final stabilization measures are being implemented. However, the evidence of sediment reaching the unnamed tributary to Sugar Creek was caused by construction activities prior to the final stabilization. In addition, sediment from this site left the site into the adjacent property.

Naji J. Ahmad
Environmental Engineer
ENST/EFCB
October 23, 2016

Attachments:

1. NPDES Industrial-Construction Stormwater Worksheet (10 pages)
2. SWPPP (CD2)
3. Site Plans (CD2)
4. Stream Nexus (2 pages)
5. NOPV (1 page)
6. A facility walk-through with photographs and photo log (CD1)
7. Emails (2 pages)
8. Response to NOPV (32 pages)

Photo Log:

The SE Westown Road improvement project of the Glynn Village Plat 10			
Photo #		**Dir.**	**Description**
DSCN	1796	East	Standing at the intersection of R22 (Ute Ave) and SE Westown looking east downhill at the stabilization of the south ditch.
DSCN	1797	East	Looking west toward Ute Ave uphill at the stabilization of the south ditch.
DSCN	1798	East	Similar to DSCN1796 but few yards closer to the east project limits.
DSCN	1799	East	Same area shown in 1798 above.
DSCN	1800	East	Same area shown in 1798 above closer to east project limits.
DSCN	1801	West	Same as picture above but looking the opposite direction to the west toward Ute Ave.
DSCN	1802	East	Looking east from the east end of the project at the top of the hill near the portable toilet. At the bottom of the hill, I observed evidence of significant sediment accumulation which reached the unnamed tributary behind the trees (NOPV#1).

DSCN	1803	NE	Closer look toward the fence dams. The silt fence is to protect a water way that flows into the unnamed tributary to sugar creek. This water is created by a culvert pipe that carry water from the north edge of the road.
DSCN	1804	NE	Closer look. Notice the sediment runoff downhill toward the tributary.
DSCN	1805	North	The Culvert pipe discharge described in 1802 above.
DSCN	1806	North	Closer look at the Culvert pipe discharge described in 1802 above closer to the unnamed tributary.
DSCN	1807	North	At the bottom of the waterway. Water discharging into the unnamed tributary.
DSCN	1808	NW	Significant sediment accumulation in the unnamed tributary from runoff from the water way and runoff from top of the hill described in the pictures below caused by the failure of the silt fence dams shown above.
DSCN	1809	NW	Tracing back the sediment from the tributary back up hill toward the silt fence dams.
DSCN	1810	SE	Tracing back the waterway from the tributary back uphill.
DSCN	1811	SE	Tracing back the waterway from the tributary back uphill. Notice amount of sediment accumulation.
DSCN	1812	NW	Looking back toward the tributary while tracing back the waterway from the tributary back uphill.
DSCN	1813	NW	Looking back toward the failed silt fence dams while tracing back the sediment from the tributary back up hill toward the silt fence dams.
DSCN	1814	NW	Looking at sediment accumulation on the hill while tracing back the sediment from the tributary back up hill toward the silt fence dams.
DSCN	1815	South	Sediment accumulation heading to the unnamed tributary downstream from the Culvert pipe discharge described in 1802 above.
DSCN	1816	South	The Culvert pipe discharge described in 1802 above.
DSCN	1817	SE	Looking at sediment accumulation on the hill while tracing back the sediment from the tributary back up hill toward the silt fence dams. There is about 6 inches of sediment accumulation using a stick estimating the size by using a 4.5 inch business card.
DSCN	1818	NW	Looking back toward the failed silt fence dams while tracing back the sediment from the tributary back up hill toward the silt fence dams.
DSCN	1819	NW	Shown sediment passing through the failed silt fence dam.
DSCN	1820	NW	Shown sediment passing through the failed silt fence dam.
DSCN	1821	NE	Looking at the inlet of the culvert pipe in the north ditch of the road. This is the inlet of the culvert pipe (runs north-south beneath the road) described above in 1805 and 1816 which created the waterway that carried sediment into the unnamed tributary. Sediment entering this inlet appeared be a combination of (a) flow from top of the sloped (uphill) north ditch starting at Ute Avenue (under the responsibility of the City), (b) flow from top of the sloped (uphill) south ditch starting at Ute Avenue (also under the responsibility of the City) and directed via a culvert pipe that runs south-north beneath the road to slow the flow via stormwater inlet (shown in 1823, 1825, and 1826 below).
DSCN	1822	West	Looking west toward Ute Ave uphill at the stabilization of the north ditch.
DSCN	1823	South	Partially covered SW inlet that discharges into Pipe A

DSCN	1824	South	Looking south at the inlet of the south ditch.
DSCN	1825	South	Same as 1823 Partially covered SW inlet that discharges into Pipe A
DSCN	1826	South	Sediment in the partially covered SW inlet mentioned in 1823 and 1825
DSCN	1827	West	Looking west toward Ute Ave uphill at the stabilization of the north ditch.
DSCN	1828	West	Closer to Ute Ave. Looking west toward Ute Ave uphill at the stabilization of the north ditch.
DSCN	1829	West	Looking west from north ditch at the intersection of Ute and Westown.
DSCN	1830	West	From the intersection of Ute and Westown. Looking east toward the east project line.

NPDES Industrial Storm Water Worksheet (Construction)

National Database Information			
NPDES ID Number	IA28471-28214		
Permit iss/exp dates	May 31, 2017		
Inspection Date	October 12, 2016		
Weather Conditions? Recent Rainfall? Date? Amount?	Rain + cold	Muddy Ground	
Facility Type *(circle one)*	Commercial/ Industrial	Residential	Municipal

General	
Inspector Name	Naji J. Ahmad
Telephone	913 551 719
Entry Time	1:45 PM
Exit Time	2:30 PM
Signature	

Facility Location Information					
Name/Location Mailing Address	Intersection of Ute(R22) & SE Westown Pkwy City of Waukee 805 University Ave. Waukee IA 50263				
GPS Coordinates	Latitude		Longitude		
Receiving Water(s)	Unnamed Tributary to Sugar Creek				
Total Area	5 acres	Disturbed area	5 acres	Start Date	3.25.2016

Contact Information		
	Name(s)	Telephone
Name(s) and Role(s) of All Parties Meeting the Definition of Operator	City of Waukee	
Facility Contact	Ed Minor, GreenTech	
Authorized Official(s)	Ed Minor GreenTech	

Site Information: *(circle all that apply)*							
Nature of Project	Residential	Commercial/ Industrial	Roadway	Private	Federal	State/ Municipal	Other
Construction Stage	Clearing/ Grubbing	Rough Grading	Infrastructure	Building Const.	Final Grading	Final Stabilization	

Basic Permit Information		
1. Permit Coverage *ESO Element 3 & 4*	Y	N
2. Permit Type	General	Individual
3. Permit, NOI accessible? *ESO Element 25*	Y	N
4. Is entire site owned by one developer/owner? How many owners? Give lot nos. if possible *ESO Element 41*	Yes - City of Waukee	
5. NOI Date	3.23.2016	

Basic SWPPP Information		
6. SWPPP prepared & available *ESO Element 5 & 30*	Y	N
7. SWPPP Contents Satisfactory	Y	N
ESO Elements 5 - 31		
8. SWPPP Implementation Satisfactory *ESO Elements 32 - 46*	Y	N
9. SWPPP Date	3.23.2016	

SWPPP Implementation (*complete in field*)	
General	
10. Site Description	*(include description of areas exposed to rainfall/runoff, drainage patterns & direction of flow)* 900 feet from Ute Ave East to Glynn Village Project flow goes East downHill to SW inlets thru to Tributary.
Stabilization Practices	
11. List stabilization practices *ESO Element 43*	*(e.g., seeding, mulching, geotextiles, sod stabilization)* Final seeding 90% of N. ditch " " 100% of S. ditch
12. Describe stabilization practices *ESO Elements 42, 43*	*(e.g., properly designed, selected, installed, maintained?)* good

13. Are stabilization measures initiated no more than 14 days after temporary or permanent construction cessation? (MO:7 days for 3:1 slopes or 3% > 150 ft long) *(ESO Element 46*	*(e.g., indicate "yes" or "no"; if "yes", how long without stabilization measures?)* yes

Structural Practices	
14. List structural controls *ESO Element 43*	*(e.g., silt fences, hay bales, storm drain inlet protection, sedimentation pond, rip rap, check dam, diversion structure, slope drain, drainage swale,)* Silt fence Rock RipRaps
15. Describe structural controls *ESO Elements 42, 43*	*(e.g., properly designed, selected, installed, maintained?) (Size of sediment basin? Disturbed acres drained?)* ~~Poor~~ ~~No protection of soil~~ apeard poop before final stabilizer

Non-Structural Controls	
16. Good Housekeeping & Waste Disposal Practices *ESO Element 45*	*(e.g., describe measures taken to prevent litter and debris from becoming a pollutant source)* yes

17. Street Cleaning *ESO Element 44*	*(e.g., describe measures taken to remove offsite accumulation of sediment)* NO ISSUE
18. Equipment Wash/ Maintenance Area *ESO Elements 42, 43*	*(e.g., properly designed, selected, installed and maintained?)* NO ISSUE
19. Concrete Washout Areas *ESO Elements 42, 43*	*(e.g., properly designed, selected, installed and maintained?* NONE onsite

Other Controls

20. Off-site Vehicle Tracking *ESO Elements 42, 43*	*(e.g., properly designed, ~~selected~~, installed and maintained?)* NONE

Miscellaneous

21. Evidence of Sediment Deposition to Surface Waters **ESO Eligibility - if "yes," site not eligible for ESO*	*(provide brief description)* yes See Report. Majority from Erosion of S. ditch Before stabilization

NPDES Industrial Storm Water Worksheet (Construction)

22. If dredge/fill material discharged, does site hold 404 permit? *ESO Element 17*	*(provide brief description of measures to prevent discharges of dredge/fill to waters of the U.S. if applicable)* ~~No~~ Yes
23. Pollution prevention measures for non-storm water discharges? **ESO Eligibility - If evidence of non-allowable non-storm water discharges, site not eligible for ESO*	*(provide brief description and determine whether/if non-storm water discharges allowable)* NONE OBSERVED
24. Notes: SWPPP Implementation	good

NPDES Industrial Storm Water Worksheet (Construction)

SWPPP Review *(can be completed in office)*

General			Notes:
25. Is there a SWPPP? *ESO Element 5*	Y	N	
26. Is a copy of the SWPPP on site or made available? *ESO Element 30*	Y	N	@ the Truck with GreenTech
27. SWPPP completed prior to NOI submission? *ESO Element 6*	Y	N	Not Sure No date on SWPPP
28. Did all "operators" sign/certify the SWPPP? *ESO Element 31*	Y	N	
29. Is SWPPP consistent with state/tribal/local regulations and permits? *ESO Element 26; 29*	Y	N	

Site Description			Notes:
30. Is there a site description? *ESO Element 9*	Y	N	
31. Nature/sequence of construction activity? *ESO Element 9A - 9B*	Y	N	
32. Total area of site and total area to be disturbed? *ESO Element 9C*	Y	N	
33. Is there a general location map? *ESO Element 9D*	Y	N	
34. Is there a site map? *ESO Element 9E*	Y	N	
35. Drainage patterns/outfalls on site map? *ESO Element 9F*	Y	N	
36. Area of soil disturbance on site map? *ESO Element 9F*	Y	N	
37. Location of major structural controls on site map? *ESO Element 9F, 29*	Y	N	
38. Location of storm water discharges to a surface water on site map? *ESO Element 9F*	Y	N	
39. Location of materials or equipment storage on site map (on-site or off-site)? *ESO Element 9F*	Y	N	

40. Location/description industrial activities? *ESO Element 9G*	(Y)	N	
41. Name of Receiving water(s) or MS4 listed? *ESO Element 9F*	(Y)	N	
42. Copy of permit language? *ESO Element 25*	(Y)	N	
43. Endangered Species Documentation? *ESO Element 23; 23A*	(Y)	N	
44. Historic Properties Documentation? *ESO Element 24; 24A*	(Y)	N	

Controls to Reduce Pollutants			Notes:
45. Does the SWPPP describe the sequence of major grading activities, temporary/permanent construction cessation, and initiation of stabilization practices? *ESO Element 14*	(Y)	N	
46. Does the SWPPP include a description of all pollution control measures (BMPs) that will be implemented to control pollutants in storm water discharges, including sequence of implementation? *ESO Element 10*	(Y)	N	
47. Does the SWPPP include a description of interim and permanent *stabilization practices* (e.g., seeding, mulching, riprap for the site)? *ESO Element 11; 12*	(Y)	N	
48. Does the SWPPP identify the sequence and timing by which *stabilization practices* will be implemented? *ESO Element 10A - 10B; 13*	(Y)	N	
49. Does the SWPPP include a description of *structural practices* (e.g., off-site vehicle tracking, silt fences, dikes, sediment traps, storm drain inlet protection) for the site? *ESO Element 15*	(Y)	N	
50. Does the SWPPP identify the sequence and timing by which *structural practices* will be implemented? *ESO Element 10A - 10B*	(Y)	N	
51. Where the *structural practice* attainable is a sediment basin that drains over 10 acres, is it adequately designed? (3,600 cu.ft/acre x total drainage acres or 2year/24 hour storm) *ESO Element 47*	(Y)	N	

52. Do areas less than 10 acres (i.e. those w.o. sediment basins) have sediment controls for down slope boundaries? *ESO Element 48*	(Y)	N	/
53. Does the SWPPP describe controls for pollutants from non-construction activities? *ESO Element 20*	(Y)	N	
54. Does the SWPPP identify off-site material storage areas? *ESO Element 9F*	(Y)	N	
55. Does the SWPPP identify potential sources of pollution (e.g., portapotties, fuel tanks, staging areas, waste containers, chemical storage, concrete cure, paints, solvents, etc...	(Y)		
56. Does the SWPPP identify storm water management measures to address storm water runoff once the construction is completed (e.g., retention ponds, velocity dissipation controls)? *ESO Element 16*	(Y)	N	
57. Does the SWPPP identify non-storm water discharges? *ESO Element 21*	(Y)	N	
58. Does the SWPPP ensure implementation of pollution prevention measures for non-storm water discharges? *ESO Element 22*	(Y)	N	

Inspections			Notes:
59. Inspections performed once every 7 days, and within 24 hours of rain event greater than 0.5 in.? *ESO Element 32*	(Y)	N	(*Attach copies of recent inspection reports.)
60. Have copies of inspection reports/all other documentation been retained as part of the SWPPP for 3 years from date permit coverage expires? *ESO Element 28*	(Y)	N	
61. Inspections performed by qualified personnel? *ESO Element 33*	(Y)	N	
62. All disturbed areas and/or used for storage and exposed to rain inspected? *ESO Element 34*	(Y)	N	
63. All pollution control measures inspected to ensure proper operation? *ESO Element 35*	(Y)	N	

NPDES Industrial Storm Water Worksheet (Construction)

64. All discharge locations inspected if accessible, or if not accessible, are nearby downstream locations inspected? *ESO Element 36; 37*	(Y)	N	
65. Entrance/exit inspected for off-site tracking? *ESO Element 38*	(Y)	N	
66. Inspection report contain all required items and certified? *ESO Element 39; 40*	(Y)	N	*(name, date, effectiveness of BMPs, actions taken or necessary, list of areas where LD operations have permanently or temporarily stopped, signature)*
67. Is SWPPP revised when BMPs added/modified within 7 days after inspection reveals problems? *ESO Element 29*	(Y)	N	
68. Has implementation of additional/modified BMPs been completed before next anticipated storm event? *ESO Element 43.C.1*	(Y)	N	
69. NOTES: SWPPP Review			

NPDES Industrial Storm Water Worksheet (Construction)

Receiving Waterbody	
70. Receiving waterbody or MS4:	City of Wankee & Tributary to Sugar Creek
71. Distance to recg. waterbody	30 Yards
72. Other off-site impacts?	
73. Has sediment been removed to reduce off-site impacts? (Attach photos)	Unknown
74. Sediment observed in stream/lake? (Attach photos)	yes see Report

Photograph Log

*(*Attach site map with location and orientation of photos, including lot numbers)*

Attachment 1 Page 10 of 10

Stream Characteristics and Water Nexus
NPDES Inspections

April 10, 2007

Stream at Discharge from Site
Location: ***Westown South ditch***

GPS Latitude: ***41.587550***
Longitude: ***-93.877885***

Channel Width (1): ***4 to 5 feet***

Bank Depth (2): ***3 to 3.5 feet***

Substrate Type (3): ***Fine silt/sand gritty, no rocks***

Avg. Water Depth: ***1.5 inches***

Visible Flow? ***X Yes*** ☐ No

Sediment from site? ***X Yes*** ☐ No

Dimensions (5): **6" D; 100' L; 6' W.**

Site Characteristics
Bank vegetative Cover (4): **0%**
Type of cover:

☐ Grass ☐ Weeds ☐ Woods

Photographs: ***DSCN1729-1731***

Culvert Size: ***48" pipe***

Footnotes and additional notes are on the second page.

Stream at Downstream of discharge
Location: _____

GPS
Latitude: _____

Longitude: _____

Channel Width (1): _____

Bank Depth (2): _____

Substrate Type (3): _____

Avg. Water Depth: _____

Visible Flow? ☐ Yes ☐ No

Sediment from site? ☐ Yes ☐ No

Dimensions(5): _____

Site Characteristics
Bank vegetative Cover (4): _____%
Type of cover:

☐ Grass ☐ Weeds ☐ Woods

Photographs: _____

Culvert Size: _____

Nexus: perennial stream
Location: ***Unnamed tributary to Sugar Creek beneath Westown PL***

GPS Latitude: ***41.58751***
Longitude: ***-93.87791***

Channel Width (1): ***20 to 22 feet***

Bank Depth (2): ***6 to 7 feet***

Substrate Type (3): ***Fine silt/sand gritty, no rocks***

Avg. Water Depth: ***8-10 inches***

Visible Flow? ***X Yes*** ☐ No

Sediment from site? ***X Yes*** ☐ No

Dimensions (5): **6" D; 20' L; 12" W.**

Site Characteristics
Bank vegetative Cover (4): **20%**
Type of cover:

X Grass X Weeds X Woods

Photographs: ***DSCN1729-1731***
Culvert Size: ***9 foot Arch Culvert Pipe under the Westown Parkway***

Distance to site: **60 yards from the 48" pipe**

(1) Model input of Channel Width: Distance from the top of one bank to the top of the other bank.

(2) Model input of bank depth: Distance from top of bank to bottom of stream.

(3) Model input of Substrate type:

a. **Fine silt/sand:** gritty, no rocks

b. **Gravel:** lady bug-sized to marble-sized rocks

c. **Coarse Gravel:** Marble-sized to Tennis ball

d. **Cobble:** Tennis ball to basketball

e. **Boulder:** Larger than basketball

(4) Model input of Vegetative Cover in percent coverage of the upper banks, check the appropriate type listed.

(5) Estimate of sediment in the stream or off-site. Measurements in three dimensions would be best.

Additional Site Notes:

Notice of Potential
National Pollutant Discharge Elimination System (NPDES)
PERMIT VIOLATIONS

Permittee (facility) Name and Address:
SE Westown Pkwy
Starting from Ute Ave going west 300 yards
Waukee, IA 50263

NPDES Permit Number: **Iowa NPDES** 28741-28214

During the Clean Water Act §308 compliance inspection conducted on **October 12, 2016**, the potential NPDES permit violations noted below were found. Additional violations may be brought to your attention following a complete review of the inspection report and other available information.

POTENTIAL NPDES PERMIT VIOLATIONS

1. **There were sediment deposits into the unnamed tributary to Sugar Creek at the east project line caused by runoff flowing down the disturbed steep slope passing through the silt fence dams onto the grassy area and into the unnamed tributary.**

REQUESTED ACTION: Within ten (10) days, please describe in writing any actions taken, or planned, to correct the potential violations identified above. Your response will be considered in the determination of the need for further administrative or legal action. Mail your description of corrective actions to your inspector at: U.S. Environmental Protection Agency, ENST/EFCB, 300 Minnesota Ave., Kansas City, KS, 66101

Inspector's printed Name: ***Naji J. Ahmad,*** Signature: _____ Date: 10-14-2016

Ahmad, Naji

From: Ed Miner <ed@greentechiowa.com>
Sent: Wednesday, October 26, 2016 9:48 AM
To: Ahmad, Naji
Subject: FW: noi
Attachments: doc00312320161026090110.pdf

Naji

Hope this helps. Let me know if you need anything else.

ED MINER
Vice President of Operations

PO Box 350 | GRIMES, IA 50111 | 515-228-3030 ed@greentechiowa.com | 515-202-2763

-----Original Message-----
From: Copier
Sent: Wednesday, October 26, 2016 9:01 AM
To: Ed Miner <ed@greentechiowa.com>
Subject:

TASKalfa 2551ci
[00:17:c8:26:a6:b7]

Attachment 7 Page 1 of 2

Ahmad, Naji

From: Wendy DeGroot <wdegroot@shive-hattery.com>
Sent: Wednesday, October 19, 2016 1:37 PM
To: Ahmad, Naji
Subject: File Transfer: Planset - Waukee-Westown Parkway-R22 Intersection

IMPORTANT: Click a link below to access files associated with this transmittal that came in through the Shive-Hattery, Inc. Info Exchange web site.

Download all associated files

Additional links:
Reply to All

Project Name: Waukee-Westown Parkway-R22 Intersection
Project Number: 4151850

From: Wendy DeGroot (Shive-Hattery, Inc.)
To: Ahmad.naji@epa.gov
CC: John Gibson (City of Waukee, IA); Nathan Hardisty (Shive-Hattery, Inc.); Tim Royer (City of Waukee, IA); jcockrean@waukee.org
Subject: Planset
Sent via: Info Exchange
Expiration Date: 11/18/2016
Remarks: Mr. Ahmad,

Attached is the planset for the Westown Parkway / R22 project you requested.

You only need to click on the link to download the files.

Wendy DeGroot, Project Coordinator

Transferred Files

NAME	TYPE	DATE	TIME	SIZE
Transmittal - 00099.pdf	Adobe Acrobat Document	10/19/2016	1:36 PM	65 KB
4151850WestownParkway02-15-16_BidPlans.pdf	Adobe Acrobat Document	2/15/2016	11:05 AM	21,176 KB

Attachment 7 Page 2 of 2

Waukee
PUBLIC WORKS

CERTIFIED MAIL

October 21, 2016

U.S. Environmental Protection Agency
ENST/EFCB
300 Minnesota Ave.
Kansas City, KS 66101

Dear Mr. Ahmad –

The City of Waukee is respectfully submitting the following information in response to the Potential NPDES Permit Violation provided for **Iowa NPDES 28471-28214**. The inspection was conducted on October 12, 2016 and a meeting was held on-site with the Owner's responsible party, GreenTech of Iowa on Friday, October 14, 2016 with the Potential Notice of Violation being provided at that time.

The potential violation that we are responding to is regarding that *"There were sediment deposits into the unnamed tributary to Sugar Creek at the east project line caused by runoff flowing down the disturbed steep slope passing through the silt fence dams onto the grassy area and into the unnamed tributary".*

At this time we would like to provide a summary of the construction activity conducted for the conversion of this road from gravel to a paved surface, including water main and storm sewer improvements. This summary covers the time period up to the EPA site visit on October 12, 2016.

- Required weekly stormwater inspections were begun on March 29, 2016 as clearing and grubbing activities had commenced.
- On April 12, 2016 silt fence was in place along the final discharge to the site, the unnamed tributary to Sugar Creek, as well as ditch checks in the ditch along the south side of the project, see Exhibit B-1 and B-2 and Control Map labelled Exhibit A.
    - On April 5, 2016
        - 135' of silt fence was installed along the southeast corner of the creek – Exhibit B-1 is facing south.
        - 95' of silt fence was installed along the southwest corner of the creek – Exhibit B-1 is facing south.
        - Ditch checks were installed along the south ditch line west of the creek in 12' and two 15' increments – Exhibit B-1 is facing south.
        - 122' of silt fence was installed along the north ditch line, on the east side, prior to the existing outfall piping under Westown Parkway discharging to the unnamed tributary to Sugar Creek – Exhibit B-2.

John R. Gibson
Public Works Director
Cell: 515-707-5002
jgibson@Waukee.org

805 University Ave., Waukee, IA 50263
515-978-7920 • Waukee.org

    - 130' of silt fence was installed along the north ditch line, on the west side, prior to the existing outfall piping under Westown Parkway discharging to the unnamed tributary to Sugar Creek – Exhibit B-2.
- Exhibit B-3, B-4 and B-5 are attached from April 26, 2016.
    - Exhibit B-3 shows controls installed along the existing final discharge channel to the unnamed tributary to Sugar Creek.
    - Exhibit B-4 shows the ditch checks installed along the south side of the road looking to the west.
    - Exhibit B-5 shows the controls installed around the existing waterway on the north side of the road looking to the northwest.
- Utility pole relocation work occurred and the road was closed the week of May 2nd
- Exhibit B-6 & B-7 are attached from May 10, 2016.
    - Exhibit B-6 is looking west at the south side final discharge controls previously installed.
    - Exhibit B-7 is looking west at the north side controls previously installed.
- Stripping activity noted to have begun on May 17, 2016 weekly inspection report. See Exhibit B-8, B-9 & B-10 attached.
    - Exhibit B-8 is looking southwesterly at the existing south side controls.
    - Exhibit B-9 is looking to the west at the existing north side controls.
    - Exhibit B-10 is looking north east at the stripping activities that have begun.
- Earthwork continued for many weeks; see Exhibit B-11 & B-12 to document site on May 31, 2016 and Exhibit B-13 & B-14 from June 7, 2016. Additional control near final outfall for added grading noted on report from June 7.
    - Exhibit B-11 is looking to the east near the R-22 intersection.
    - Exhibit B-12 is looking to the west near the east limits of the site.
    - Exhibit B-13 is looking to the southwest at the existing controls on the south side of the roadway at the final discharge.
    - Exhibit B-14 is looking to the northwest from the final discharge on the south side of the roadway.
- 6/14/16 report requests additional controls be provided near final outfall as grade continues to grow, see Exhibit B-15 & B-16.
    - Exhibit B-15 is looking to the northwest from the final discharge on the south side of the roadway.
    - Exhibit B-16 is looking to the northeast from the final discharge on the south side of the roadway.
- On July 5th the final outfall pipe, FES 1.1, to the unnamed tributary had been installed.
- On July 25th an additional 977' of silt fence were installed on-site.
- A picture from July 26th was taken along the south side of the road looking east, see Exhibit B-17.
- On July 28th the FES 1.4A and 1.4 structure to direct water from the south side ditch to the north side for final discharge was installed. The berm directly downstream from FES 1.4A. was installed at this time.
- It was noted that during the August 9, 2016 weekly inspection that an additional 5 ditch checks were installed along the upstream reaches of the project as documented on Exhibit A. On this date it was documented that the piping was completed to take water from the south ditch to MH1.2 and at this time rip rap installation was begun.
- The 8/16/16 weekly report documented that rip rap is in place. Request for cleaning of ditch checks noted and more requested to be installed. Note that at this time no sediment was leaving the site. Intakes are noted to be covered with steel plates. Exhibit B-18 shows the rip rap

in place at the final discharge outlet FES1.1 Additional pictures showing upstream ditch checks in the south ditch looking east Exhibit B-19 and B-20 showing one of the ditch checks in place on the north side of the site looking east.

- On the August 23rd report it was noted that topsoil re-spread has begun on-site. A request for silt fence to be placed around the rip rap and intake points in the ditches was noted. Existing ditch checks were noted to be full and a request was noted for them to be replaced. At this time a note was made that the Glynn Village site may flow on to this site from the east. Exhibit B-21 was taken on this date and shows the ditch check in place along the south side of site looking east.
- See Exhibit B-22 for conditions observed 8/29/16. This picture was taken from the Glynn Village site looking west and it shows controls in place in the distance as shown on Exhibit A.
- On the September 20th weekly report areas of the south side of the site have been seeded and matting is scheduled for today. No issues with erosion and sedimentation noted.
- See Exhibit C that provides information for areas that have been seeded and matted as of September 25, 2016 and October 10, 2016.
- Please find attached additional Exhibit B-23 to show stabilization measures in place.

The City of Waukee appreciates your consideration of the above documentation, in addition to the inspection reports and Storm Water Pollution Prevention Plan, provided at the time of the meeting on-site with GreenTech of Iowa in your review of this Potential Notice of Violation. We will be awaiting the written report of this investigation and are available to answer any further questions or provide any additional documentation that may assist in your completion of this case.

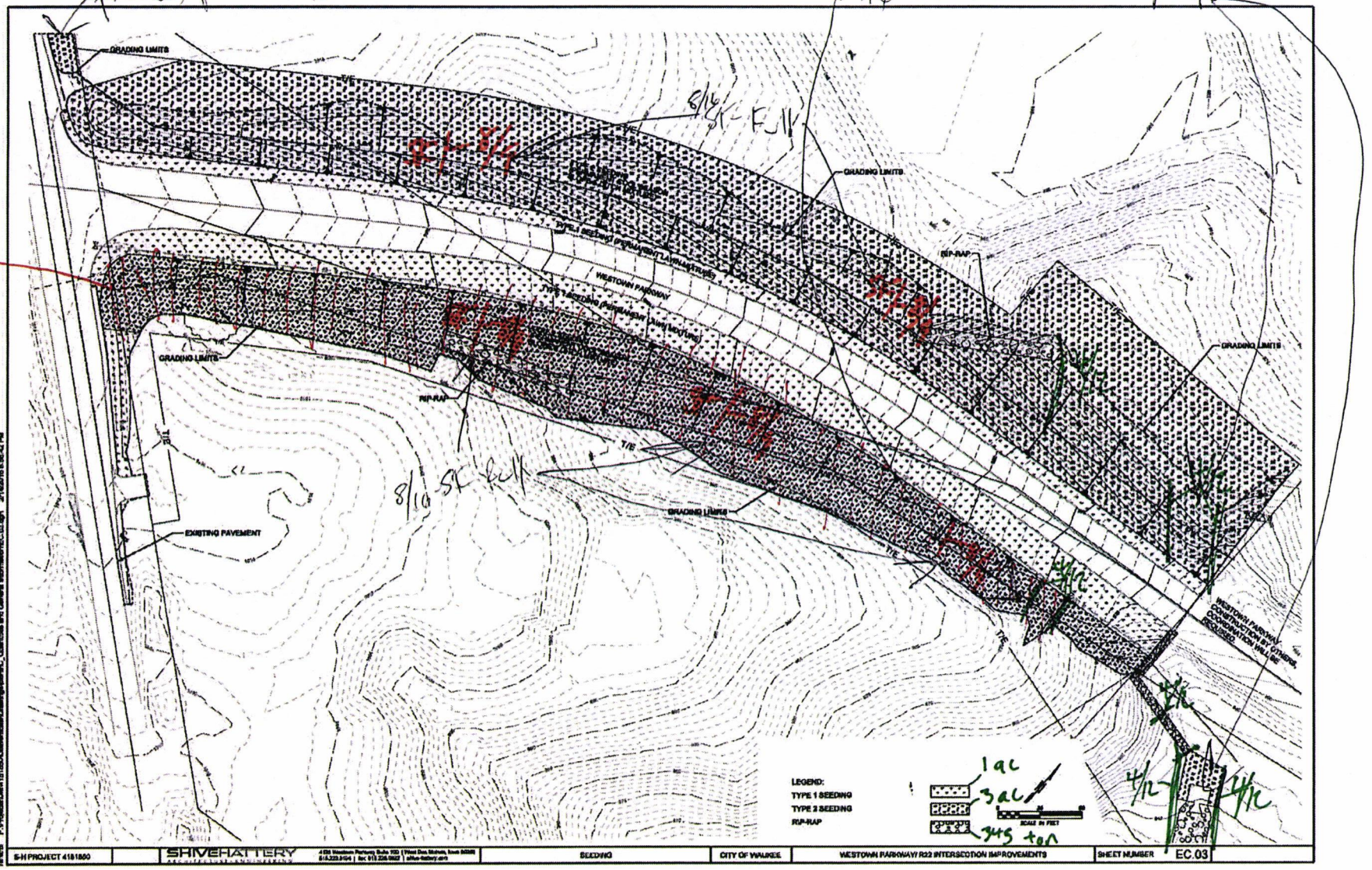
Sincerely,

John R. Gibson
Director of Public Works

cc: Tim Moerman, City of Waukee City Administrator

Exhibit A

Sediment Control Map



pipe needs protected 8/16

8/16 SF needed above Rip rap

8/16 SF - Full

8/16 SF - Full

8/16 SF - Full

STORM WATER POLLUTION PREVENTION PLAN

PROJECT NAME

Site Map

leaving 1/29

Attachment 8 Page 5 of 32

Exhibit A

Exhibit B

Pictures

1

BLANK

2

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Attachment 8 Page 11 of 32

Attachment 6 Page 12 of 32

Attachment ___ Page ___ of ___

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6

Attachment 6 Page 14 of 32

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Attachment 5 Page 24 of 32

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Attachment 8 Page 22 of 32

19

Attachment 8 Page 27 of 32

20

21

Attachment 8 Page 28 of 32

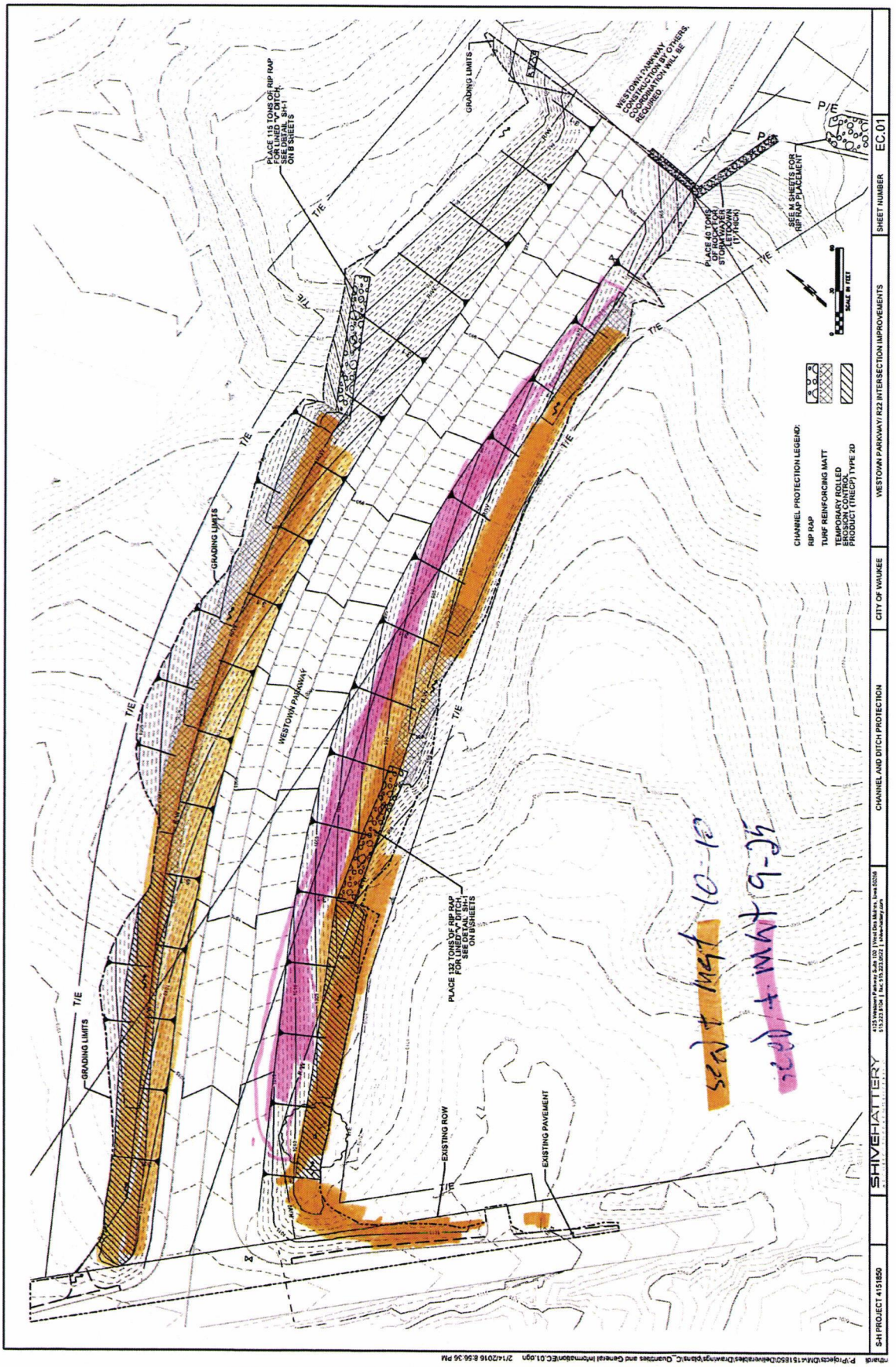
Attachment 8 Page 29 of 32

22

23

Exhibit C

Erosion Control Map



STORM WATER POLLUTION PREVENTION PLAN
WESTOWN PARKWAY & R22 INTERSECTION IMPROVEMENTS
Site Map

Exhibit C

Waukee
THE KEY TO GOOD LIVING

Waukee Public Works
805 University Avenue
Waukee, IA 50263

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